AMENDMENTS TO THE CLAIMS

Docket No.: 13156-00061-US1

- 1. (currently amended) A process for the distillation of ionic liquids, which comprises the following steps:
 - [[A]] setting a pressure which is not higher than ambient pressure, and
 - [[B]] heating to a temperature in the range from 60°C to 350°C.
- 2. (currently amended) The process according to claim 1, wherein cations, anions and uncharged molecules which are formed, in particular, by protonation or alkylation of the anions by the cations are present in equilibrium in the ionic liquid.
- 3. (currently amended) The process according to claim 1 or 2, wherein <u>uncharged molecules</u> are formed in the process, and at least the more volatile of the uncharged molecules is distilled off in the distillation.
- 4. (currently amended) The process according to any of claims 1 to 3 claim 1, wherein the pressure is [[<]] less than 200 mbar.
- 5. (currently amended) The process according to any of claims 1 to 4 claim 1, wherein the pressure is [[<]] less than 50 mbar.
- 6. (currently amended) The process according to any of claims 1 to 5 claim 1, wherein the pressure is [[<]] less than 5 mbar.
- 7. (currently amended) The process according to any of claims 1 to 6 claim 1, wherein the temperature is in the range from 100°C to 350°C.
- 8. (currently amended) The process according to any of claims 1 to 7 claim 1, wherein the temperature is in the range from 150 to 350°C.
- 9. (currently amended) The process according to any of claims 1 to 8 claim 1, wherein both at least two uncharged molecules are formed in the process, and at least two of the uncharged molecules are distilled off separated off by distillation.

Application No. National Phase of PCT/EP2005/000084 First Preliminary Amendment

10. (currently amended) The process according to any of claims 1 to 9 claim 9, wherein the at least two of the uncharged molecules which have been distilled off are recombined again to form an ionic liquid.

Docket No.: 13156-00061-US1

- 11. (currently amended) The process according to any of claims 1 to 8 claim 9, wherein either one of the two uncharged molecules which have been separated distilled off by distillation is utilized again is used to prepare a different type of an ionic liquid or only the more volatile uncharged molecule is utilized for this purpose.
- 12. (currently amended) The use of the process according to any of claims 1 to 11 Method for the purification of ionic liquids using the process according to claim 1.
- 13. (currently amended) The use of the process according to any of claims 1 to 11 Method for the recirculation of ionic liquids using the process according to claim 1.
- 14. (New) The process according to claim 3, wherein the pressure is less than 50 mbar.
- 15. (New) The process according to claim 3, wherein the more volatile of the uncharged molecules that is distilled off is used to prepare an ionic liquid.
- 16. (New) The process according to claim 1, wherein uncharged molecules are formed by protonation or alkylation of the anions by the cations.
- 17. (New) The process according to claim 16, wherein the more volatile molecule of the uncharged molecules is distilled off and is used to prepare an ionic liquid.
- 18. (New) The process according to claim 17, wherein the pressure is less than 50 mbar and the temperature from 100°C to 350°C.